

## Work engagement among dental and medical professionals in Jodhpur city

Divya Parakh<sup>1,\*</sup>, Bharath K Garla<sup>2</sup>, Rushabh Dagli<sup>3</sup>, Geetika Arora Bhateja<sup>4</sup>, Deepika Vyas<sup>5</sup>, Preksha Pawa<sup>6</sup>

<sup>1,5,6</sup>PG Student, <sup>3</sup>Reader, <sup>4</sup>Senior Lecturer, Vyas Dental College & Hospital, <sup>2</sup>Professor & HOD, Dept. of Public Health Dentistry, Best Dental Sciences College, Tamil Nadu

**\*Corresponding Author:**

Email: divyajain5@yahoo.com

### Abstract

**Introduction:** Work Engagement which is characterized by vigor, dedication, and absorption is known to have positive impact on mind of individual. An optimistic approach that focuses on promotion of engagement at work place rather than reducing stress is considerably an effective intervention.

**Methodology:** A questionnaire based survey was conducted among 204 medical and dental practitioners to measure work engagement in Jodhpur city, using the Utrecht Work Engagement Scale-17(UWES-17). The respondents use a seven point Likert scale to indicate the frequency with which they experience the feeling described by the statement, ranging from 0 (never) to 6 (always). Statistical analysis was undertaken using SPSS version 22.0 software (SPSS Inc., Chicago II, United States of America). Work engagement scores were compared according to various demographic features using the Mann-Whitney U test and Kruskal-Wallis Chi<sup>2</sup> test. Item scores are totaled and divided by 17 and compared to various demographic features.

**Results:** The study shows association between study participants according to the gender, education, designation, income, marital status, practice, practitioners in private and government practice with Utrecht work engagement scales. Total Utrecht Work Engagement scale was related to education.

**Conclusion:** Of all the other dimensions, education was significantly associated with work engagement, indicating that education has buffering effect which delivers energy and boosts work engagement.

**Keywords:** Work Engagement, Dental & medical practitioners, Education

Access this article online	
<b>Quick Response Code:</b> 	<b>Website:</b> www.innovativepublication.com
	<b>DOI:</b> 10.5958/2395-499X.2016.00013.7

### Introduction

Work Engagement which is characterized by vigor, dedication, and absorption is known to have positive impact on mind of individual. Engagement refers to determined, entrenching affectively cognitive stage rather than short lived and defined stage which only focuses on particular individual, event or object. Vigor marks higher energy level and mental resilience at work, the willingness to put the extra effort even in difficult situations. Dedication refers to being intensely involved in work that gives one own self sense of enthusiasm, pride, significance and inspires to face challenges. Absorption can be characterized by being intensely enveloped in work whereby it's difficult to detach oneself from work and time quickly passes.<sup>1</sup>

Work engagement is supposed to be opposite of burnout. Engaged workers are enthusiastic and feel vigorous than their burned out counterparts at work.

The concept of work engagement may be more functionally applied than burnout. The productivity at work can be enhanced by positive work setting which boosts core qualities of energy, involvement and effectiveness. Thus, we should focus more on promoting work engagement than reducing stress at work for effective intervention as the former leads to changing the job context, while the latter leads to action of changing individual.<sup>2</sup>

This study is first to present information on work engagement among medical and dental practitioners in Jodhpur city.

### Methodology

**Study design:** A questionnaire based survey was conducted to measure work engagement among medical and dental practitioners in Jodhpur city. This study was conducted using the Utrecht Work Engagement Scale-17.

**Ethical approval:** Ethical approval for conducting the survey was obtained from the ethical committee of Vyas Dental College and Hospital.

**Data collection:** The present study was conducted for 3 months among the 204 registered doctors of Jodhpur city. Each doctor was personally approached by Principal Investigator at their work place requesting for participation in the survey. The questionnaire was given in person to the participating doctors after explaining

the study design. The participants were asked to indicate their level of agreement or disagreement with the statements on a seven point Likert scale with '6' indicating strong agreement (and hence always) and '0' indicating strong disagreement (and hence never). Time duration of approximately 24 hours was given to the respondents to complete the questionnaire, and the completed forms after the said period were collected by investigator. All doctors were reminded once before the deadline. The reminder was given through phone calls to return the questionnaire.

Dentists who had retired from the profession, had changed their profession, or were pursuing post graduation were excluded from the study.

**Informed consent:** Verbal consent was obtained from all the Doctors and they were assured that the information would be held confidential.

**Measures:** A questionnaire was designed using the Utrecht Work Engagement Scale (UWES-17). In addition, demographic information was requested at the end of the questionnaire.

The UWES-17 consists of a series of 17 statements which relate to each of the work engagement domains, vigour (VI), dedication (DE) and absorption (AB). The respondents used a seven point Likert scale to indicate the frequency with which they experience the feeling described by the statement, ranging from 0 (never) to 6 (always).

**Statistical analysis:** Statistical analysis was undertaken using SPSS version 22.0 software (SPSS Inc., Chicago II, United States of America). Descriptive statistics were calculated for work engagement scales. Work engagement scores were compared according to various demographic features using the Mann-Whitney U test and Kruskal-Wallis Chi<sup>2</sup> test. Item scores are totaled and divided by 17 and compared to various demographic features.

Differences were tested with an overall significance level of 0.05.

## Discussion

A cross sectional study has been done on 204 dental and medical doctors residing in Jodhpur city.

In the present study it was found more participation of males than females. Previous researchers had also pointed out the similar findings that men socialized to promote themselves whereas women socialized to be modest in this regard.<sup>3</sup> Schaufeli, Bakker, & Salanova (2006) found a weak but vague relationship between work engagement and gender.<sup>4</sup> The results of this study said that no gender difference was observed in the mean score of male and female.

In our present study it was noted that higher engagement level of doctors' was associated with their clinical productivity and pay levels which is

proportional to work engagement being directly associated with procedure fees and good performance after controlling demographic and other work related variable. This result is in context with several previous studies in other professions where relationship between work engagement and job performance was studied.<sup>5,6,7,8</sup> Certainly, whether it is blue-collar job (firemen, fast food restaurant workers) or white-collar job (teachers, dentists), the employees engaged seem to perform better and are more productive than their counterparts.<sup>9</sup>

The present study results was found to be similar to other studies where it was found more percentage of high engaged employees' work in non-acute facilities (i.e., community health centers, continuing care, rehabilitation and mental health facilities) compared with other peer groups. Furthermore, small hospitals have a slightly higher percentage of fully engaged employees, compared with teaching hospitals and community hospitals. These differences underline the need to develop peer group benchmarks for tracking employee engagement and other key workplace metrics.

As it was found in the present study higher number of participant are involved in private practice in medical and dental sectors. These results supported the JD-R model by showing that dentists in the public sector, were exposed to higher demands and had fewer job resources than dentists working in private sector. The personal achievements have proven to be a burden on work engagement.<sup>11</sup>

Engagement levels are considerably higher in part-time employees than full time employees. Temporary and on-call workers also report slightly higher engagement levels. The above findings support the role of duration and flexibility at work.<sup>12</sup>

The experiences at work are particularly important for the individual's overall level of well-being and mental health in the long-term. In contrast to this, for work-related well-being other issues in life (e.g. marital relationships, life events) that influence general well being may not be as important as those that are work-related,<sup>13</sup> which was also found in the present study.

The present study shows direct relation of work engagement with education. The postgraduate qualifications being associated with work engagement, implying that level of education entrusts energy and boosts work engagement. Similar results were found by D. A. Denton et al.<sup>10</sup>

Although it is individual's decision to undertake postgraduate education, but cost, heavy work load and the belief that their service will not be reciprocated, could be addressed through changes in health policy.<sup>10</sup>

Therefore, an engaged person is more likely to invest in work, which may include higher education.

The present study shows more participation of post graduates from medical field and higher mean score on work engagement scale of post graduate doctors.

## Result

The study consisted of 204 Doctors in the Jodhpur city who returned the questionnaires. The study shows association between study participants according to the gender, education, designation, income, marital status, practice, practitioners in private and government practice with Utrecht work engagement scales.

The mean score on Utrecht work engagement scale among male was higher ( $5.12 \pm 0.53$ ) than female ( $5.04 \pm 0.55$ ). [Table 1]

Among all participants, 33(16%) were MBBS, 70(34%) were BDS, 72(35%) were MS/MD, 29(15%) were MDS doctors. The mean dimension score on Utrecht work engagement scale was  $4.9 \pm 0.54$  MBBS,  $5.1 \pm 0.45$  among BDS,  $5.08 \pm 0.33$  among MS/MD and  $5.31 \pm 0.92$  among MDS. [Table 2]

Private practitioners were highest i.e. 92 (45%), with mean  $5.06 \pm 0.49$ , followed by 42 (21%) Assistant Professor's, 26(13%) lecturer's, 21 (10%) Associate Professor's, 13(6%) Professor's, 10(5%) Head of department. [Table 3]

Out of all participants, 103(51%) had income above Rs. 50000, with higher mean ( $5.14 \pm 0.57$ ) which

was more than 101(49%) respondents who had income between Rs.20000-49999, with mean being  $5.04 \pm 0.49$ . [Table 4]

Maximum participants were married, 195 (96%) with mean ( $5.1 \pm 0.53$ ), 7(3%) were unmarried and 2(1%) were divorced. [Table 5]

Maximum participants were practicing privately 92(45%), with mean ( $5.09 \pm 0.45$ ) higher than 14(6%) participants in academics with mean  $5.07 \pm 0.39$ . [Table 6]

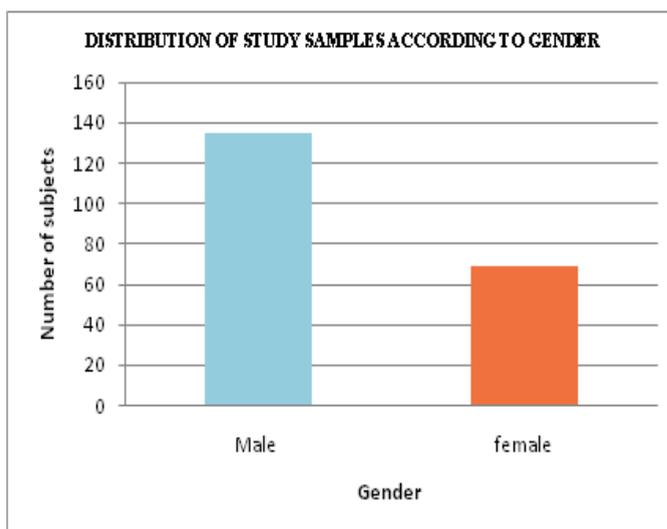
Out of all participants, higher number of participant were practicing in private dental and medical sectors than government sectors, with highest mean ( $5.12 \pm 0.45$ ) among dental private practitioners. [Table 7] The difference between the scores was found to be statistically not significant. ( $p \leq 0.05^*$ ,  $p \leq 0.01^{**}$ ,  $p \leq 0.001^{***}$ )

Table 8 shows multiple linear regression analysis predicting work engagement scores among various variables. After controlling for other demographic characteristic, total Utrecht Work Engagement scale was related to education, which means higher work engagement, is significantly associated with education.

**Table 1: Association between study participants according to Gender on Utrecht work engagement scale**

Gender	Number (%)	Utrecht Work Engagement		
		Mean $\pm$ SD	Mann-Whitney U	p Value
Male	135(66%)	$5.12 \pm 0.53$	4343	0.16
Female	69(34%)	$5.04 \pm 0.55$		

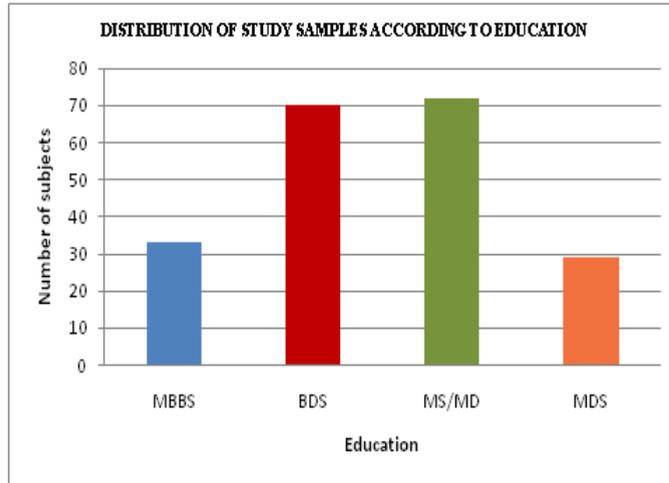
$p \leq 0.05^*$ ,  $p \leq 0.01^{**}$ ,  $p \leq 0.001^{***}$



**Table 2: Association between study participants according to education on Utrecht work engagement scale**

	Number (percentage)	Utrecht Work Engagement		
		Mean $\pm$ SD	Kruskal-Wallis Chi <sup>2</sup>	p Value
MBBS	33(16%)	$4.9 \pm 0.54$	6.53	0.08
BDS	70(34%)	$5.1 \pm 0.45$		
MS/MD	72(35%)	$5.08 \pm 0.33$		
MDS	29(15%)	$5.31 \pm 0.92$		

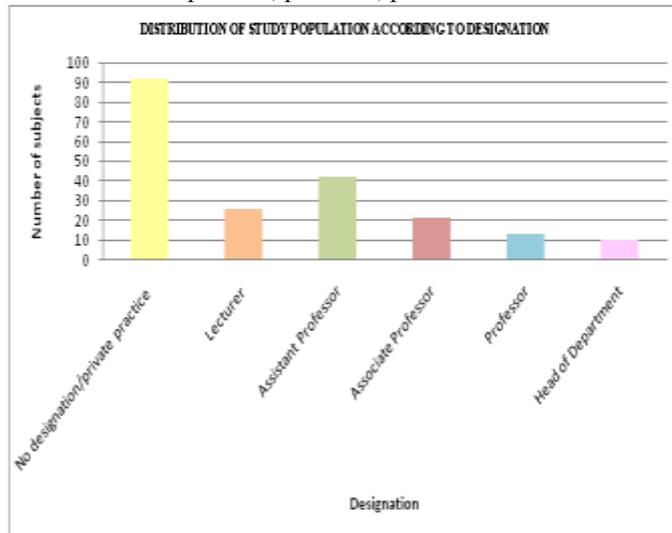
p≤0.05\*, p≤0.01\*\*, p≤0.001\*\*\*



**Table 3: Association between study participants according to Designation on Utrecht work engagement scales**

Designation	Number(%)	Utrecht Work Engagement		
		Mean±SD	Kruskal-Wallis Chi <sup>2</sup>	p Value
No designation/private practice	92 (45%)	5.06 ±0.49	2.01	0.84
Lecturer	26 (13%)	5.14 ±1.03		
Assistant Professor	42 (21%)	5.08±0.37		
Associate Professor	21 (10%)	5.15±0.36		
Professor	13 (6%)	5.09 ±0.31		
Head of Department	10 (5%)	5.14±0.15		

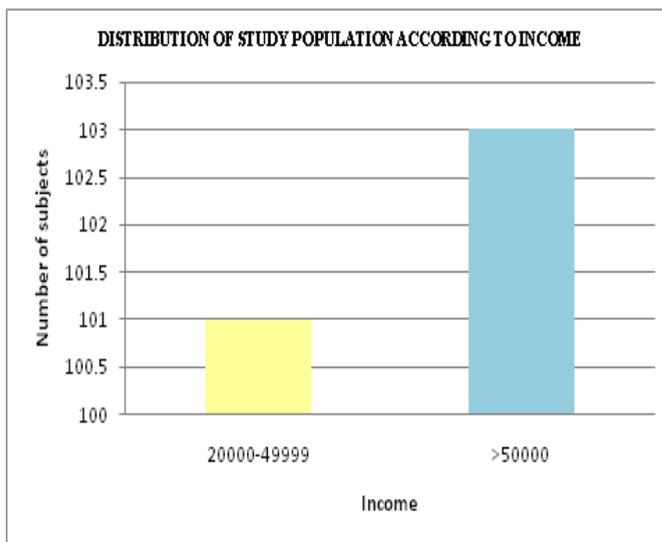
p≤0.05\*, p≤0.01\*\*, p≤0.001\*\*\*



**Table 4: Association between study participants according to Income on Utrecht work engagement scales**

Income	Number (percentage)	Utrecht Work Engagement		
		Mean±SD	Mann-Whitney U	p Value
20000-49999	101 (49%)	5.04±0.49	5146	0.81
>50000	103 (51%)	5.14±0.57		

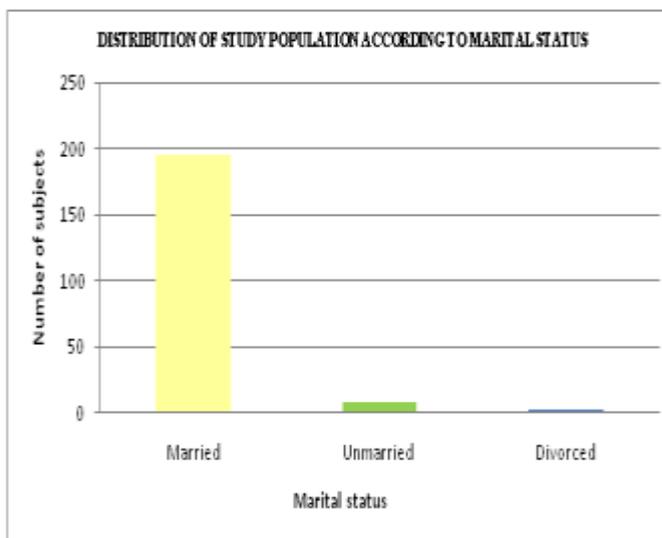
p≤0.05\*, p≤0.01\*\*, p≤0.001\*\*\*



**Table 5: Association between study participants according to marital status on Utrecht work engagement scales**

Marital status	Number(percentage)	Utrecht Work Engagement		
		Mean±SD	Kruskal-Wallis Chi <sup>2</sup>	p Value
Married	195(96%)	5.1±0.53	0.83	0.65
Unmarried	7(3%)	4.7±0.47		
Divorced	2(1%)	5.17±0.16		

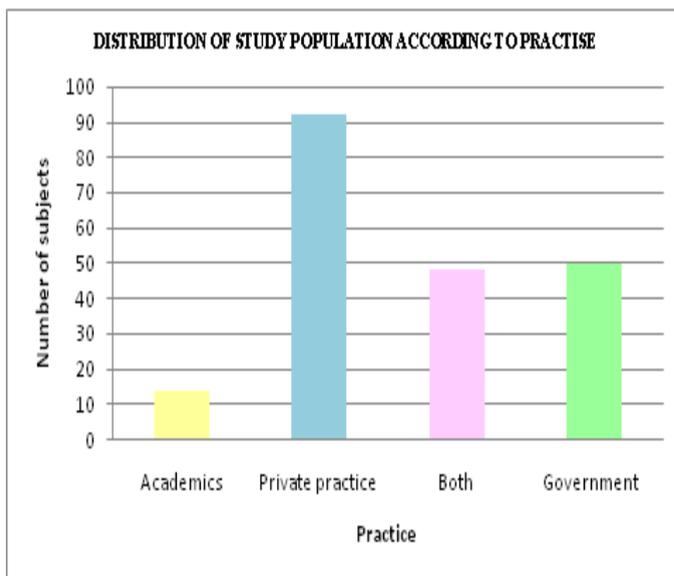
p≤0.05\*, p≤0.01\*\*, p≤0.001\*\*\*



**Table 6: Association between study participants according to Practice on Utrecht work engagement scales**

Practice	Number(%)	Utrecht Work Engagement		
		Mean±SD	Kruskal-Wallis Chi <sup>2</sup>	p Value
Academics	14 (6%)	5.07±0.39	0.19	0.97
Private practice	92 (45%)	5.09±0.45		
Both	48 (24%)	5.03±0.37		
Government	50 (25%)	5.16±0.79		

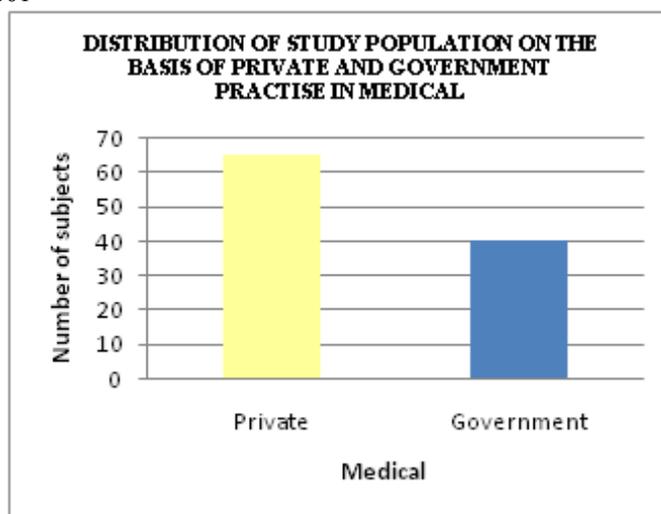
p≤0.05\*, p≤0.01\*\*, p≤0.001\*\*\*

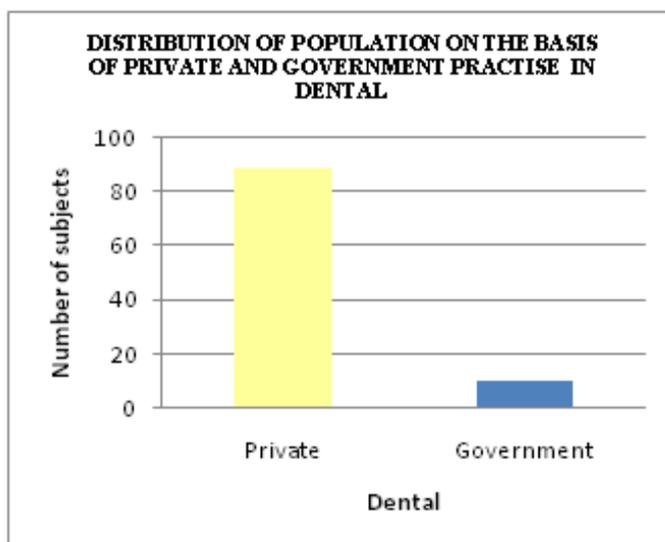


**Table 7: Association between Utrecht work engagement scales and medical/ dental practitioners in private and government practice**

	Number(percentage)	Utrecht Work Engagement		
<b>Medical</b>				
		Mean±SD	Mann-Whitney	p Value
Private	65(61.9%)	5.0±0.38	U=1289	0.91
Government	40(38.1%)	5.05±0.47		
<b>Dental</b>				
Private	89 (89.9%)	5.12±0.45	U=400.5	0.3
Government	10 (10.1%)	5.6±1.47		

p≤0.05\*, p≤0.01\*\*, p≤0.001\*\*\*





**Table 8: Multiple linear regression analysis predicting work engagement scores**

Model	B	Beta	p value
Sex	-0.062	-0.055	0.436
Education	0.116	0.203	0.020*
Designation	-0.038	-0.108	0.235
Income	0.028	0.026	0.770
Marital status	-0.064	-0.042	0.558
Practice	0.038	0.066	0.380

$p \leq 0.05^*$ ,  $p \leq 0.01^{**}$ ,  $p \leq 0.001^{***}$

**Conflict of interest:** None

## References

1. Wilmar Schaufeli, Arnold Bakker. The Utrecht Work Engagement Scale.2003. Version 1.
2. Leiter, M. P., & Maslach, C. (2004). Areas of worklife: A structured approach to organizational predictors of job burnout. In P. Perrewé & D. C. Ganster, (Eds.), Research in occupational stress and well being: Vol. 3. Emotional and physiological processes and positive intervention strategies: 91-134. Oxford, UK: JAI Press/Elsevier.
3. Farrell, S.K., & Finkelstein, L.M. (2007). Organizational Citizenship Behavior and Gender Expectations and Attributions for Performance. North American Journal of Psychology,9(1),81-96.
4. Schaufeli, W.B., Bakker, A.B., & Salanova, M. (2006). The Measurement of Work Engagement with a Short Questionnaire: A Cross-National Study. Educational and Psychological Measurement,66(4),701-716.
5. Rich, B.L., Lepine, J.A., & Crawford, E.R. (2010). Job Engagement: Antecedents and Effects on Job Performance. Academy of Management Journal,53(3),617-635. <http://dx.doi.org/10.5465/AMJ.2010.51468988>.
6. Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2007). The role of personal resources in the job demands–resources model. International Journal of Stress Management,14,121–141.
7. Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. Work engagement and financial returns: A diary study on the role of job and personal resources. Journal of Occupational and Organizational Psychology (2009),82,183–200.
8. Arnold B. Bakker and Matthijs P. Bal. Weekly work engagement and performance: A study among starting teachers. Journal of Occupational and Organizational Psychology(2010),83(1),189–206.
9. Jari J. Hakanen, Jaakko Koivumäki. Engaged or exhausted—How does it affect dentists' clinical productivity? Burnout Research. Volume 1, Issue 1, June 2014, Pages 12–18.
10. D. A. Denton, J. T. Newton and E. J. Bower. Occupational burnout and work engagement: a national survey of dentists in the United Kingdom. Br Dent J, 205 E13 (2008), pp. 1–8.
11. Arnold B. Bakker, Evangelia Demerouti. The Job Demands-Resources model: state of the art. Journal of Managerial Psychology (2007),22(3),309-328.
12. Graham Lowe. How Employee Engagement Matters for Hospital Performance. Healthcare Quarterly(2012),15(2),29-39.
13. Jari J. Hakanen, Wilmar B. Schaufeli. Do burnout and work engagement predict depressive symptoms and life satisfaction? A three-wave seven-year prospective study. Journal of Affective Disorders 141(2012);415–424.